

FLUORESCENT LIGHTING



MANUFACTURERS OF
QUALITY LIGHTING EQUIPMENT
SINCE 1910

The Home of Engineered Seeing

DISTRIBUTED BY

TERREAU & RACINE, LTEE.

Fondeurs et Marchands

194 A 228, rue St. Paul

Quebec, Canada

INDEX AND ORDERING INFORMATION

TERMS OF SALE

1. Prices are subject to change without notice and include Sales Tax.
2. All prices quoted are F.O.B. Toronto.
3. Lamps are not included in prices.
4. No claims will be allowed for fixtures lost or damaged in transit, as our responsibility ends with receipt of delivery slip from the carrier. Place your claims promptly with the carrier.
5. No merchandise to be returned for credit without authority in writing from our HEAD OFFICE.
6. A CHARGE OF 10% OF INVOICE PRICE WILL BE MADE FOR RE-STOCKING ANY RETURNED MERCHANDISE.
7. Fixtures other than regular catalogued items cannot be returned for credit.
8. Defective fixtures or parts (except starters and lamps) will be replaced upon receipt at our factory within the guarantee period of one year. **We will assume no responsibility for outside expenses, shipping charges, etc.**
9. When ordering, please use catalogue number and specify any special overall lengths, finishes, etc., otherwise standard units will be shipped.
10. C.O.D. orders should be accompanied by a cheque for 25% of value.
11. New accounts are always welcome on a credit basis, but to expedite shipment of your initial order, please furnish us with the name of your bank and credit references.

BALLAST GUARANTEE INFORMATION

The Ballast manufacturer guarantees the ballasts to be free from defects in material and workmanship for a period of one year from date of installation.

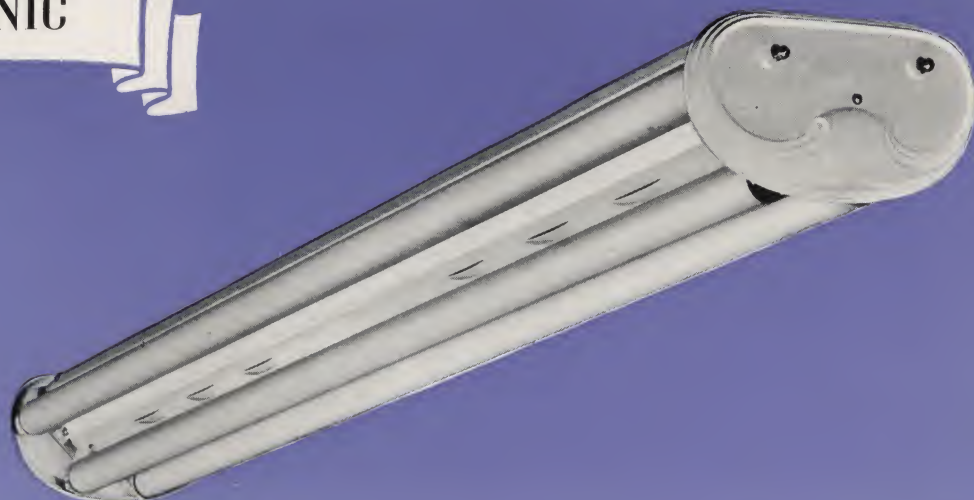
In the event of such defects developing, the ballast manufacturer agrees to repair or replace the defective ballast free of charge, provided the ballast is returned to the company with transportation charges paid both ways.

We are subject to the above conditions in replacing defective ballasts, therefore, we cannot assume any charges incidental to the changing of ballasts in the field. We also cannot accept transportation charges to or from our factory, on such replacements.

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FLUORONIC



The 'FLUORONIC' line is one of the most smartly designed open type fixtures on the market. The symmetrical body shape has a minimum of bulk yet sacrifices nothing in reflecting efficiency. The decorative ends conceal the sockets while permitting the removal of tubes without having to loosen any screws or handle other parts of the fixture.

The tubes are so positioned that the upper two adequately light the ceiling. They are wired so that the stroboscopic effect is reduced to a minimum.

The sockets are mounted on cast ends which guarantee continued rigidity, eliminating the possibility of the socket spacing changing with continued lamp renewals.

The entire fixture is finished in a white baked-enamel which will retain its appearance indefinitely.

This is an economical fixture; it is designed especially for installations where general overall lighting is desired, such as, modern stores and display rooms. It combines maximum efficiency with smart modern appearance.

Adjustable spotlights are available for use in conjunction with the above units for continuous row mounting. Refer to Page 22 for standard types.

ESSENTIAL DATA—HIGH POWER FACTOR—110/120V.

Cat. No.	Type	Lamp Data	Shipping Weight	
			25 Cycle	60 Cycle
F88	Close-up	2-40w-48"	40 lbs.	30 lbs.
F89	Close-up	3-40w-48"	*45 lbs.	35 lbs.
F90	Close-up	4-40w-48"	57 lbs.	39 lbs.
F95	Close-up	6-40w-48"	65 lbs.	55 lbs.

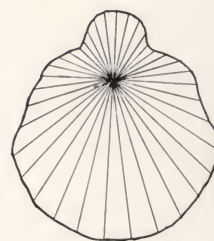
*F89—25 cycle is for 3 phase, 208 volt operation.

For suspension mounting—order Hanger Assembly No. 4010—See Page 15.

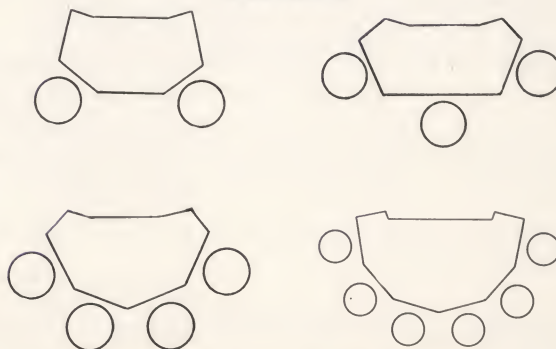
FEATURES

- Neat, compact design.
- Provides adequate ceiling illumination.
- No shadows above fixtures.
- Maximum light output.
- Easily maintained.
- Scientifically ventilated.

Typical Distribution Curve



Cross Section



ILLUMINATION CODE LETTER—FLUORONIC

(See Chart Back Cover)

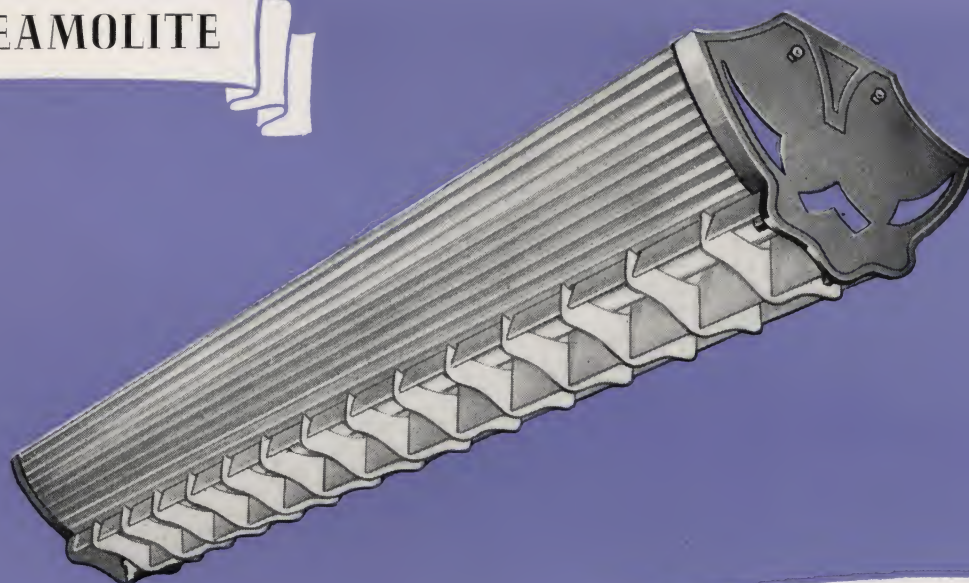
Room Proportions		F88	F89	F90	F95
Large	*	J	O	S	X
Medium	**	H	M	P	U
Small	***	E	I	L	Q

* Room Width = 4 Times Height. ** Room Width = 2 Times Height

*** Room Width = Height.



STREAMOLITE



Here we have one of the finest examples of the fixture designer's art. This unit achieves that desirable combination of an extremely decorative appearance with maximum efficiency.

Like all "Wilson" lighting equipment, the "Streamolite" embodies cast ends to hold the sockets rigidly and permanently in position. The Albalite glass panels are easily removed for cleaning, or servicing the tubes. These panels are scientifically curved to produce maximum diffusion along with a pleasing appearance. The louvred bottom is of an unique design which provides a smartly tailored appearance with no sacrifice in shielding angles.

The body of the fixture is finished in hard-wearing white baked-enamel which provides a permanent reflecting surface for the lamps. The indirect component of light is sufficient to properly illuminate the ceiling while the major portion of the light is directed downward into useful angles.

This unit is strongly recommended for better class stores, offices, and schools.

ESSENTIAL DATA—HIGH POWER FACTOR—110/120V.

Cat. No.	Type	Lamp Data	Shipping Weight	
			25 Cycle	60 Cycle
F50	Close-up	2-40w-48"	55 lbs.	50 lbs.
F51	Close-up	3-40w-48"	*60 lbs.	55 lbs.
F52	Close-up	4-40w-48"	80 lbs.	60 lbs.
F53	Close-up	6-40w-48"	90 lbs.	70 lbs.

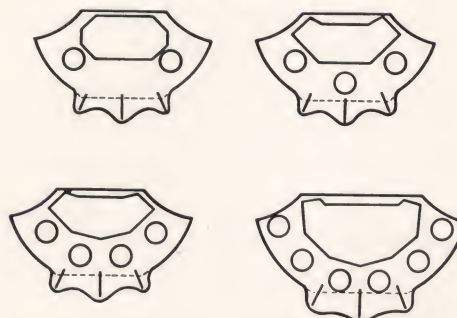
* F51—25 cycle unit is for 3 phase, 208 volt operation.

For suspension mounting—order Hanger Assembly No. 4010—See Page 15.

FEATURES

- Designed for Individual or Continuous row mounting.
- Easily cleaned and serviced.
- Louvred for proper Lateral Cut-off.
- May be mounted Closeup, or suspended by Twin-rod Hangers.
- Sturdily constructed with decorative cast ends.
- Efficient—Modern—Pleasing appearance.

Cross Section



ILLUMINATION CODE LETTER—STREAMOLITE

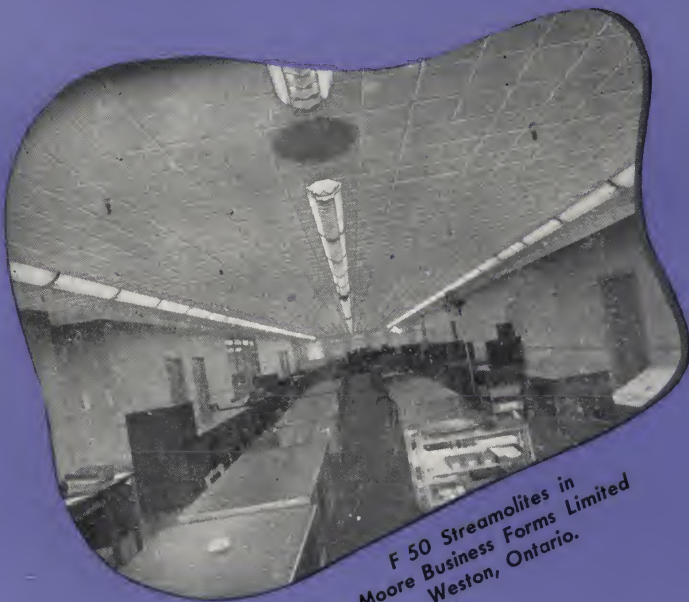
(See Chart Back Cover)

Room Proportions	F50	F51	F52	F53
Large *	H	L	P	U
Medium **	F	J	M	R
Small ***	D	H	J	O

* Room Width = 4 Times Height. ** Room Width = 2 Times Height

*** Room Width = Height.





F 50 Streamolites in
Moore Business Forms Limited
Weston, Ontario.



F 53 Streamolites in
Sunbeam Corporation Limited
Mount Dennis, Ont.

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO
TORONTO, ONTARIO

ILLUMINATION LABORATORY

REPORT No. **LO 3771**

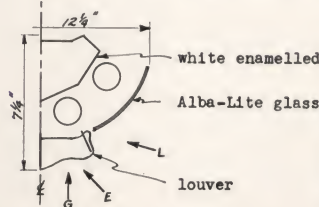
CURVE No. **80962**

Rendered to: **J.A. Wilson Lighting and Display
Limited, Toronto.**

Luminaire: **F52-60**

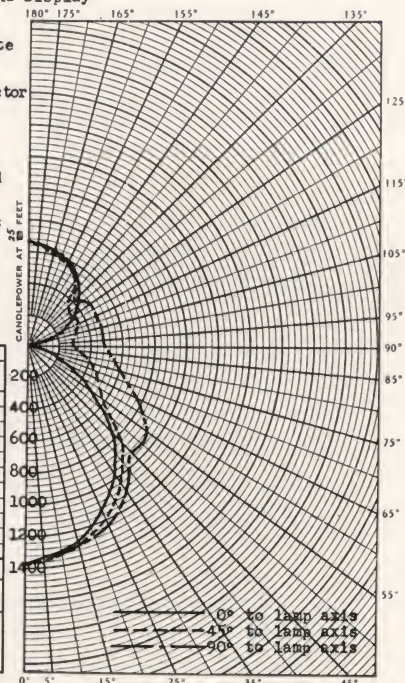
Lamp: **Four 40 w, Type F, 3500K, white
lamps at 2100 lumens each.**

Auxiliary: **Two, two lamp 118 volts,
60 cycles, high power factor**



LUMINAIRE DISTRIBUTION DATA					
MID- ZONE ANGLES	CANDLE- POWER AT 1 FEET	ZONAL LUMENS	MID- ZONE ANGLES	CANDLE- POWER AT 1 FEET	ZONAL LUMENS
180°ZEN	660		90°HOR	399	
175°	659	63	85°	293	320
165°	618	175	75°	385	407
155°	588	272	65°	542	538
145°	541	340	55°	709	636
135°	437	338	45°	850	658
125°	389	349	35°	1035	650
115°	357	354	25°	1188	550
105°	308	326	15°	1291	365
95°	268	293	5°	1352	129
			0°NADIR	1367	

LIGHT FLUX VALUES				
ZONE	LUMENS	PER CENT TOTAL LUMENS SAME LAMP	PER CENT LIGHT OUTPUT	
0°-60°	2988	35.6		
0°-90°	4253	50.7		
90°-180°	2510	29.9		
0°-180°	6763	80.6		



LUMINAIRE BRIGHTNESS												
THE ARROWS INDICATE THE LOCATION AND ANGLE OF VIEW												
LOCATIONS	A	B	C	D	E	F	G	H	I	J	K	L
CP PER SQ. IN.					4.74		4.85					4.31
FOOT LAMBERTS					2140		2197					1950

TESTED BY **lws** PLOTTED BY **lws** COMPUTED BY **lws** CHECKED BY **lws** ISSUED **Oct. 20, 1947**

APPROVED BY

TESTING ENGINEER IN CHARGE OF ILLUMINATION LABORATORY

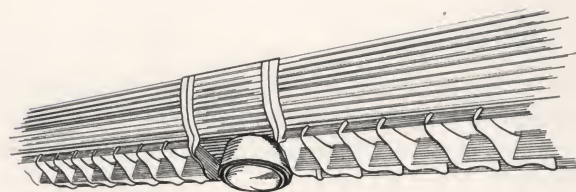
IN CHARGE OF TEST

Distribution curve on F50—2 lamp unit available on request.

"STREAMOLITE SPOT-LIGHTS"

Adjustable spot-light units are available for use with the Streamolite series of fixtures. They fit in line with the regular units and form a smart combination unit to dramatize your selling.

Louvres and coloured glass lenses may be clipped on if desired.



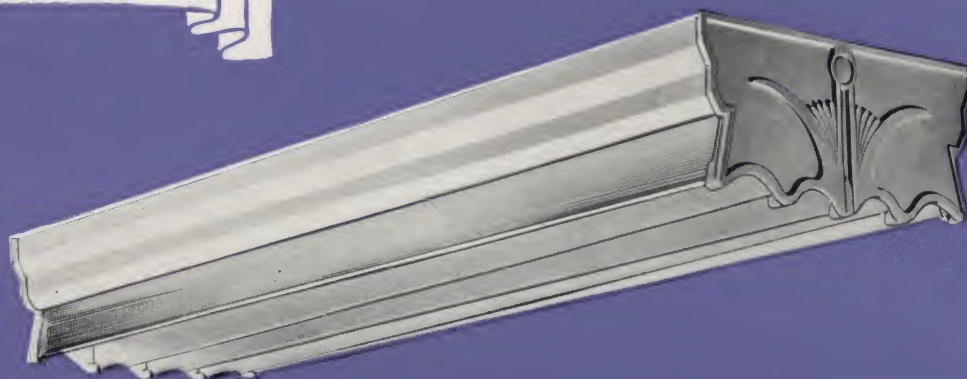
The above illustration represents a typical installation of the adjustable spotlight. This unit is for use in continuous rows of Streamolite fixtures.

ESSENTIAL DATA

Cat. No.	Type	Lamp Data	Shipping Weight
5591	F52—Adjustable	150w-R40	8 lbs.
5593	F53—Adjustable	150w-R40	12 lbs.
5584	Lens and louver holder		1 lb.
5585	Louvre		1 lb.
5586	Lens—red, green, blue, amber		1 lb.



FLUORALUME



The ever popular **FLUORALUME** fixture is still one of the finest types available. This unit provides adequate transverse shielding for the tubes. It features the patented mixing-shield between the tubes. This is a glass panel of special diffusing quality which merges the light from the two tubes, thus reducing the stroboscopic effect to a minimum. This fixture provides maximum light output, as the lamps are exposed below, and is excellent for direct lighting applications.

These fixtures are finished entirely in the famous "Wilson" baked-enamel. This is a permanent white finish which is easily cleaned and restored to its original appearance and efficiency.

These units are recommended for office and store lighting where high efficiency and excellent quality are desired. Their rugged cast-end construction assures many years of trouble-free service.

Adjustable spotlights which conform to the design of the above fluorescent fixtures are available for incorporation in continuous rows. Further details available on request.

ESSENTIAL DATA—HIGH POWER FACTOR—110/120V.

Cat. No.	Type	Lamp Data	Shipping Weight	
			25 Cycle	60 Cycle
F60	Close-up	2-40w-48"	50 lbs.	40 lbs.
F61	Close-up	4-40w-48"	80 lbs.	70 lbs.
F63	Close-up	3-40w-48"	*65 lbs.	55 lbs.

* F63—25 cycle is for 3 phase, 208 volt operation.

For suspension mounting—order Hanger Assembly No. 4010—See Page 15.

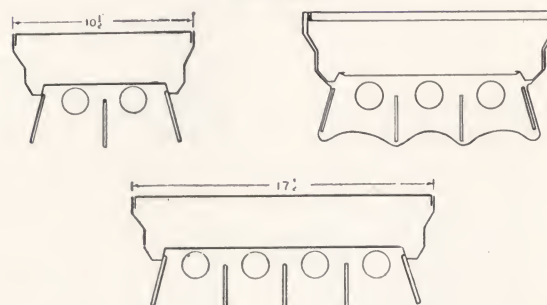
FEATURES

- Patented centre mixing-shield.
- Cast ends guarantee rigid socket mounting.
- Durable reflecting surface.
- Easily cleaned and serviced.
- Low maintenance.

Typical Distribution Curve



Cross Section



ILLUMINATION CODE LETTER—FLUORALUME

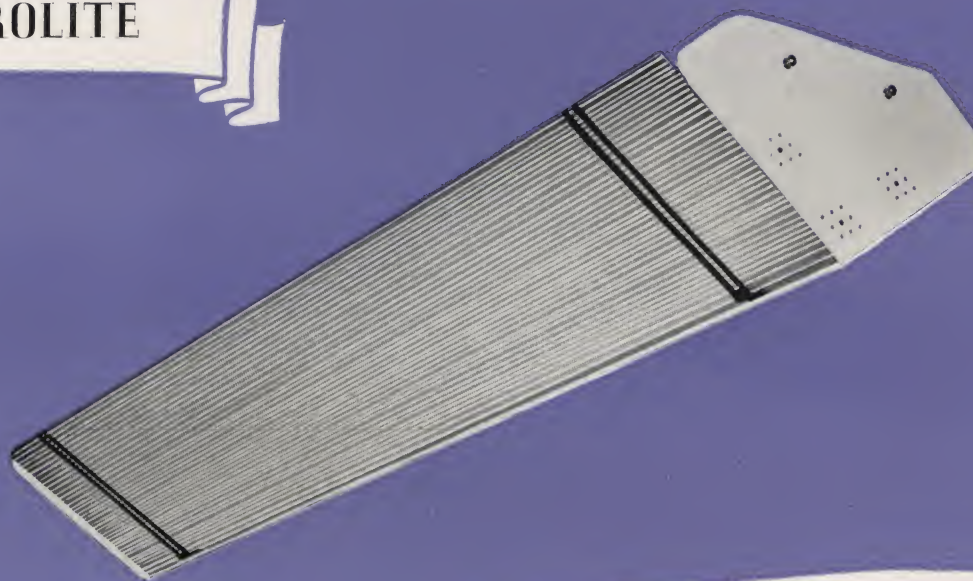
(See Chart Back Cover)

Room Proportions		F60	F63	F61
Large	*	J	O	S
Medium	**	I	M	Q
Small	***	F	J	M

* Room Width = 4 Times Height. ** Room Width = 2 Times Height
*** Room Width = Height.



MIROLITE



This 'WILSON' engineered unit is outstanding in the semi-direct field. The frameless glass panel, which is securely hinged to the top of the fixture, permits of easy servicing and lamp renewals. It is merely necessary to raise the glass panel and let it swing free to expose the reflecting surfaces and lamps. Another feature is the opening between the glass panels which permits insects and dirt to fall out; thus assuring continued good appearance and efficiency. The glass used is ribbed albalite. This is of maximum efficiency and has a pleasing milk-white appearance which looks equally well whether lighted or not.

This fixture may be mounted close-up to the ceiling and lends itself nicely to continuous row installation. In high ceiling rooms where servicing is a problem the hinged glass panel is a very desirable feature.

This unit is strongly recommended for use in school lighting. It also provides the highest quality and distribution for better class stores and offices. The semi-direct type of light assures a minimum of glare for critical seeing tasks.

Adjustable spotlights which conform to the design of the above fixtures are available for incorporation in continuous rows. Further details available on request.

ESSENTIAL DATA—HIGH POWER FACTOR—110/120V.

Cat. No.	Type	Lamp Data	Shipping Weight	
			25 Cycle	60 Cycle
F108	Close-up	2-40w-48"	68 lbs.	58 lbs.
F109	Close-up	3-40w-48"	*72 lbs.	61 lbs.
F110	Close-up	4-40w-48"	80 lbs.	64 lbs.
F111	Close-up	6-40w-48"	100 lbs.	84 lbs.

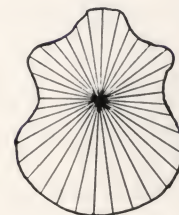
* F109—25 cycle unit is for 3 phase, 208 volt operation.

For suspension mounting—order Hanger Assembly No. 4010—See Page 15.

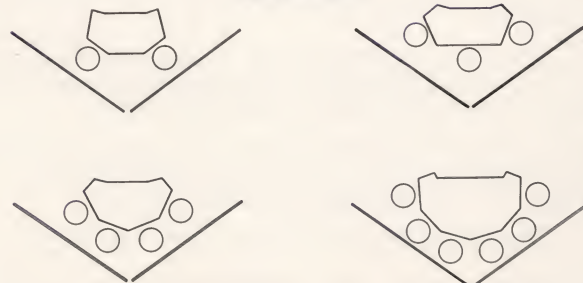
FEATURES

- Exclusive hinged glass panels.
- Easily serviced and maintained.
- Open bottom permits dirt to fall out.
- Ribbed Albalite panels.
- Designed for individual or continuous row mounting.
- Sturdily constructed.

Typical Distribution Curve



Cross Section



ILLUMINATION CODE LETTER—MIRALITE

(See Chart Back Cover)

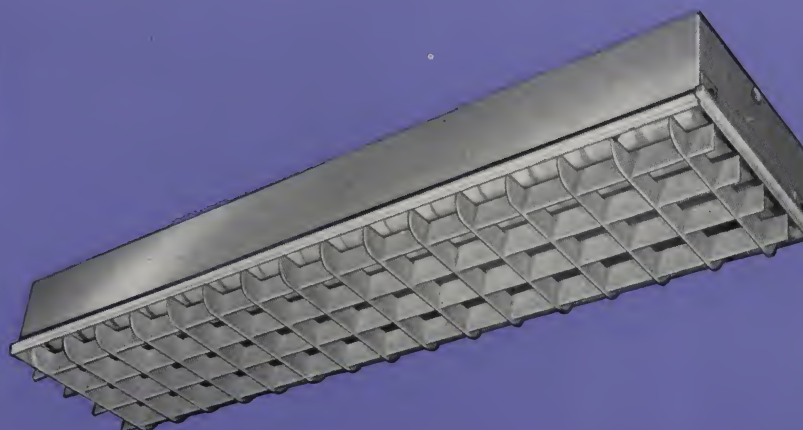
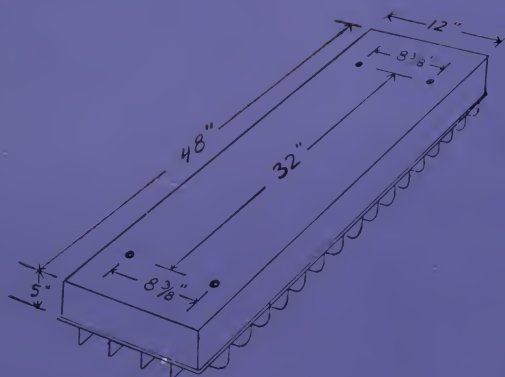
Room Proportions		F108	F109	F110	F111
Large	*	G	K	O	T
Medium	**	E	I	L	Q
Small	***	C	G	I	N

* Room Width = 4 Times Height. ** Room Width = 2 Times Height

*** Room Width—Height.



RECESSALITE



There is an increasing demand for a recessed fixture which is adaptable to practically any style of ceiling construction. 'Wilson' engineers have achieved such a unit in the "Recessalite" illustrated above. Note the compact design which only requires 5½" of depth in the ceiling to accommodate this fixture. The body is 12" x 48" and can be inserted in an acoustic ceiling by merely removing four squares. Another feature of this unit is the fact that the body may be mounted into the ceiling and used as a furring box for plastered ceilings. The reflector and trim are applied afterwards to conceal the rough edge of the plaster or ceiling boards, and provide a neat frame around the fixture.

The frame also accommodates the modernly designed Egg-crate louvre which extends below the ceiling. This louvre provides excellent shielding of the lamps and adds a decorative touch to the unit. The fixture may also be used with a flat glass panel which is inserted into the same frame as the louvre.

The fixture is available in two, three, or four lamps with the same sized body.

The entire unit is finished in hard wearing white baked-enamel which provides a highly efficient reflecting surface and permits of regular cleaning with no harmful effect to the finish.

Fixed or adjustable recessed spotlights are available for incorporation in continuous rows with the above type of fixtures. Refer to Page 22 for standard types.

Recessing details and hangers are illustrated on Page 11.

ESSENTIAL DATA—HIGH POWER FACTOR—110/120V.

Cat. No.	Type	Lamp Data	Shipping Weight	
			25 Cycle	60 Cycle
F10	Flush	2-40w-48"	40 lbs.	30 lbs.
F11	Flush	3-40w-48"	*45 lbs.	35 lbs.
F12	Flush	4-40w-48"	50 lbs.	40 lbs.
4001	Glass panel for above		8 lbs.	
4002	Egg-crate louvre for above		8 lbs.	

* F11—25 cycle is for 3 phase, 208 volt operation.

For suspension mounting—order Hanger Assembly No. 4010—See Page 15.

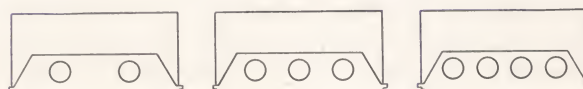
FEATURES

- Fits opening size 48" x 12".
- Only 5½" depth required in ceiling.
- May be used open, with glass, or louvres.
- Same sized body for 2, 3, or 4 lamps.
- May be mounted singly or in rows.

Typical Distribution Curve



Cross Section



ILLUMINATION CODE LETTER—RECESSALITE

(See Chart Back Cover)

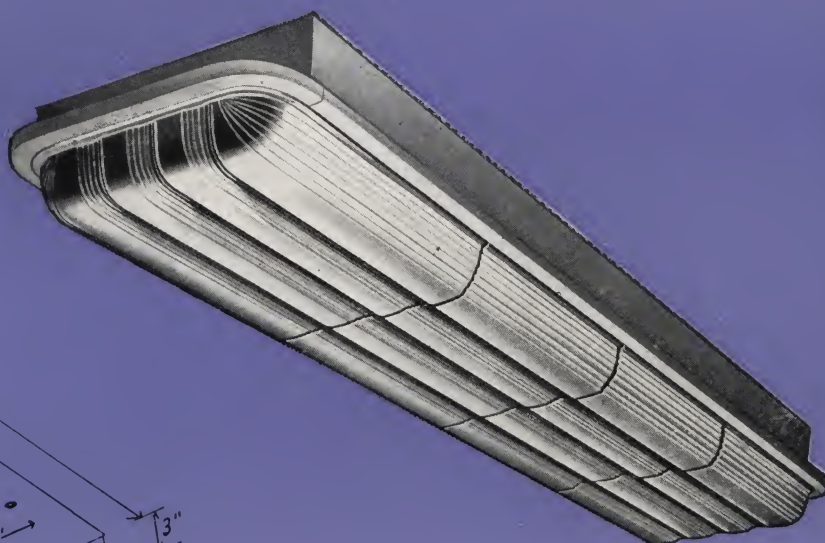
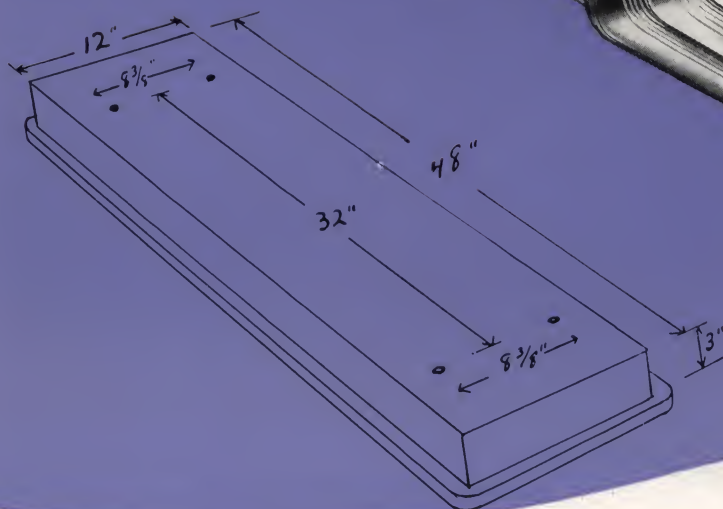
Room Proportions	F10	F11	F12
Large *	L	P	V
Medium **	K	O	U
Small ***	H	L	O

* Room Width = 4 Times Height. ** Room Width = 2 Times Height.

*** Room Width = Height.



PRISMALITE



The **PRISMALITE** is an architecturally correct glass unit of exclusive design. It is so arranged that it may be semi-recessed in the ceiling to provide a streamlined prismatic unit, with a minimum of exposed metal.

The body is engineered to adequately accommodate the electrical equipment and yet not be too deep. It looks very well on the surface of the ceiling, and is recommended in this way where the structural members do not permit of recessing. For extremely high ceilings it may be suspended on rods, either singly, or in continuous runs; the same as on the close-up or semi-recessed styles.

One feature of this unit is the fact that it may be run in indefinite lengths using the intermediate glass panels. At the end of a run a curved-end glass section is inserted which blends the fixture into the ceiling and completes the streamlined appearance.

For continuous runs specify—Type "A" Primalite units for the end sections, and Type "B" Primalite units for the in-between sections.

The prisms are so arranged that the entire fixture appears equally illuminated throughout. The side refracting lenses direct a sufficient amount of light to the ceiling to eliminate the dark shadows usually evident with this type of lighting.

Adjustable spotlights are available for use in conjunction with the above units for continuous row mounting. Refer to Page 22 for standard types.

ESSENTIAL DATA—HIGH POWER FACTOR—110/120V.

Cat. No.	Type	Lamp Data	Shipping Weight	
			25 Cycle	60 Cycle
F31	Close-up	3-40w-48"	*85 lbs.	75 lbs.
F32	Close-up	4-40w-48"	92 lbs.	82 lbs.
F32EL	Replacement	End type lens		10 lbs.
F32CL	Replacement	Center type lens		10 lbs.

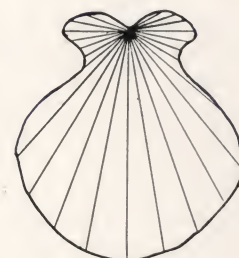
* F31—25 cycle unit is for 3 phase, 208 volt operation.

For suspension mounting—order Hanger Assembly No. 4010—See Page 15.
For recessing data refer to Page 11.

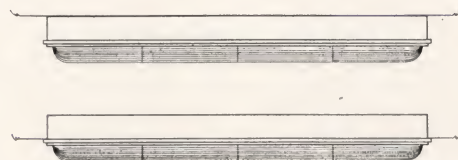
FEATURES

- Designed for continuous row or individual mounting.
- Engineered specifically for semi-recessed installation, but can be satisfactorily mounted close-up or pendant.
- Low maintenance factor.
- Rounded, Modernistic appearance.

Typical Distribution Curve



Mounting Methods



ILLUMINATION CODE LETTER—PRISMALITE

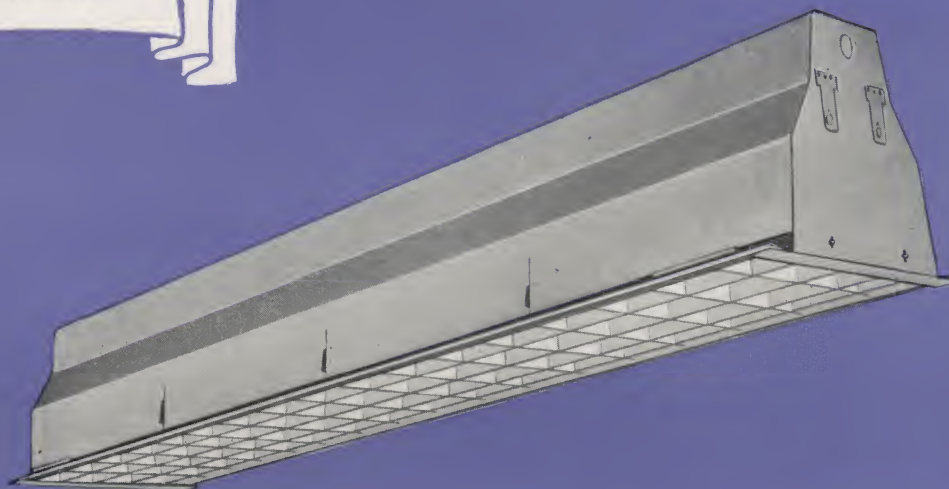
(See Chart Back Cover)

Room Proportions		F32 and F32C
Large	*	S
Medium	**	Q
Small	***	M

* Room Width = 4 Times Height. ** Room Width = 2 Times Height.
*** Room Width = Height.



TROFFALITE



The ever popular TROFFALITE fixture has proven its worth through many years of satisfactory service. This fixture is available in the 2-40 watt size only. It is so designed that it will readily recess in an opening 12" x 48". A unique feature permits the use of three baffles, an egg-crate louvre, or a flat glass panel. Any of these three are easily removed by merely tilting to one side and allowing them to drop out.

The fixture is provided with a suitable frame which hides the edge of the opening. Removable end trim is provided which may be used for single installation or removed when the fixtures are joined in continuous rows.

This fixture is excellent for mounting between joists.

It is finished in hard wearing white baked-enamel throughout for maximum efficiency.

Fixed or adjustable recessed spotlights are available for incorporation in continuous rows with the above type of fixtures. Refer to Page 22 for standard types.

These fixtures are available for either standard ceiling construction; or for insertion in TEE-BAR SNAP-IN-BLOCK ceilings.

ESSENTIAL DATA—HIGH POWER FACTOR—110/120V.

Cat. No.	Type	Lamp Data	Shipping Weight	
			25 Cycle	60 Cycle
F81	Flush	2-40w-48"	50 lbs.	40 lbs.
4003	Egg-crate louvre		10 lbs.	
4008	Pluralite glass		10 lbs.	
7000	Metal Baffles (set of 3)		10 lbs.	

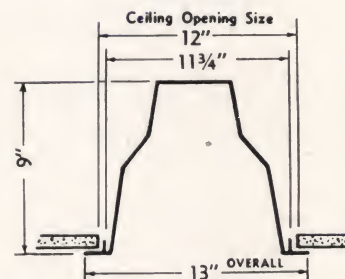
FEATURES

- Available for standard or TEE-BAR ceilings.
- Use open, louvred or with glass.
- Fits 12"x48" ceiling opening.
- Glass or louvres easily removed.
- For individual or continuous row mounting.
- Sturdily constructed.
- C.S.A. approved.

Typical Distribution Curve



Dimensions



The Troffalite fixture is only made in the standard two lamp size. For recessed fixtures having 3 or 4 lamps refer to the Recessalite on page 8.

For further recessing information see opposite page.

ILLUMINATION CODE LETTER—TROFFALITE

(See Chart Back Cover)

Room Proportions		F81
Large	*	L
Medium	**	K
Small	***	H

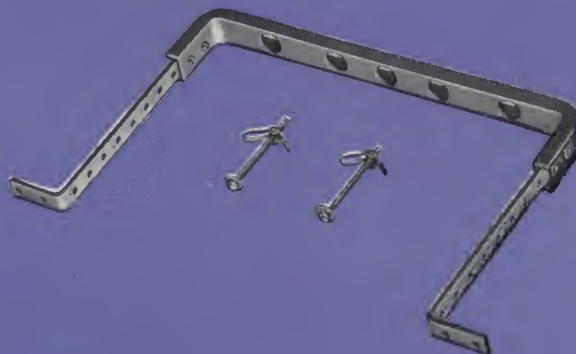
* Room Width = 4 Times Height. ** Room Width = 2 Times Height.
*** Room Width = Height.



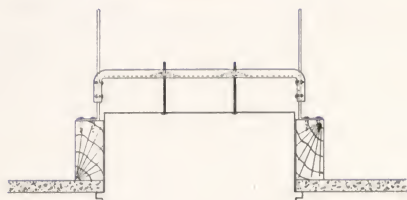
RECESSING DATA



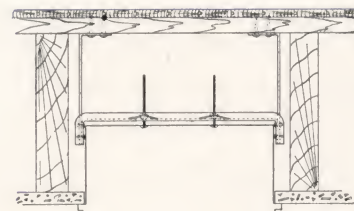
4016 Wilson suspension rod for hanging recessed fixtures from upper ceiling.



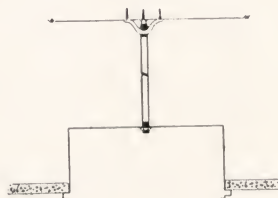
4015 Wilson Universal hanger assembly for recessed fixtures.



The illustration above shows typical use of mounting strap when wood rail is used. Note how angle brackets are fastened to top of rail and cross-bar is adjusted to proper height for particular type of fixture being installed. Toggle bolts are supplied to fasten fixture securely to cross-bar.

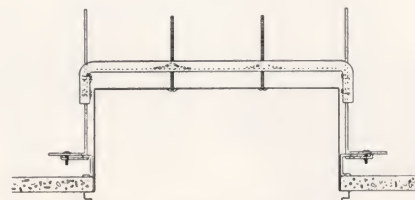


The above illustration shows method of using angle brackets and cross-bar when fixtures are to be recessed between existing joists. Mount angle-brackets to upper ceiling and adjust cross-bar to proper height to accommodate type of fixture being installed.



The above illustration shows rod hanger which is used where lower ceiling is not carried on rails or where rails are not located properly for fixture locations. Crow-foot is fastened to upper ceiling and rod adjusted to proper length to support type of fixture being installed.

For further information regarding the use of the above recessing styles, or for information concerning other types of ceiling construction, send full details to the Head Office.



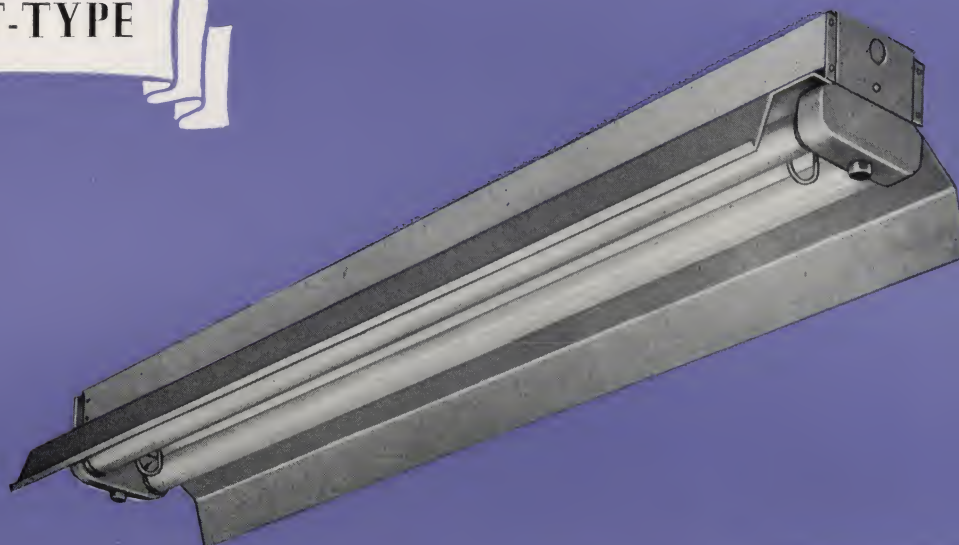
The illustration above shows method of mounting angle-brackets when steel rail is used. Note small clamp which grips steel rail to hold bracket in place. (Specify steel-rail type when this additional clamp is required).

ESSENTIAL DATA

Cat. No.	Description	Shipping Weight
4015	Recessing hanger assembly	3 lbs.
4016	Suspension Rod (Recessing)	1 lb.



TURRET-TYPE



The **TURRET-TYPE** industrial unit has proven very popular. The spring-loaded lamp holders permit of easy insertion and removal of the lamps. They also assure a good contact and at the same time remove the possibility of lamps falling out.

These fixtures are available in both 2-lamp and 3-lamp styles.

The "Wilson" unit is equipped with the patented quick-release catch which permits the reflector to be removed quickly and easily for cleaning and servicing.

The top of the housing is arranged to accommodate a clamp which may be mounted on a hanger or clipped to steel girders, etc. Knock-outs are provided in the top and ends of the fixture to facilitate wiring from any position.

The starters are conveniently located.

The fixtures are available in either porcelain or baked-enamel styles. They are finished white both inside and out.

A flat reflector is available to special order.

The suspension clamp for the 4225, as illustrated on this page, may be used for rod or cable mounting, or may be fastened directly to the outlet box in the ceiling. Two clamps are required for each fixture. These are finished in cadmium plate.

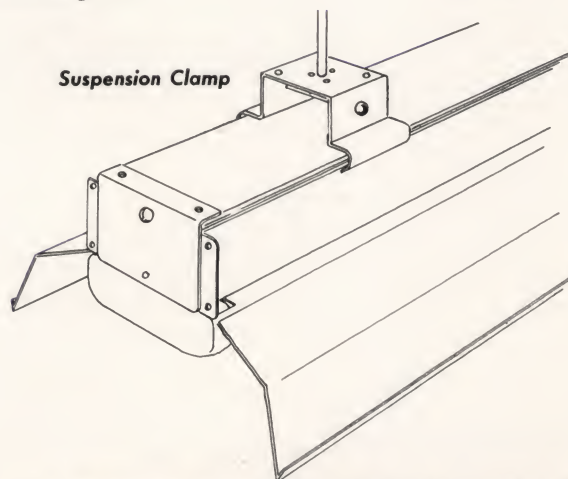
FEATURES

- Turret-Type safety socket.
- White inside and out for improved appearance.
- Quick-release catch on reflector.
- Starters readily accessible.
- Channel top for clamp mounting.

Typical Distribution Curve



Suspension Clamp



Dimensions—Length 49¼", Width 12", Height 6¾"

ILLUMINATION CODE LETTER—TURRET-TYPE

(See Chart Back Cover)

Room Proportions		2-lamp	3-lamp
Large	*	L	Q
Medium	**	K	P
Small	***	H	M

* Room Width = 4 Times Height. ** Room Width = 2 Times Height.
*** Room Width = Height.

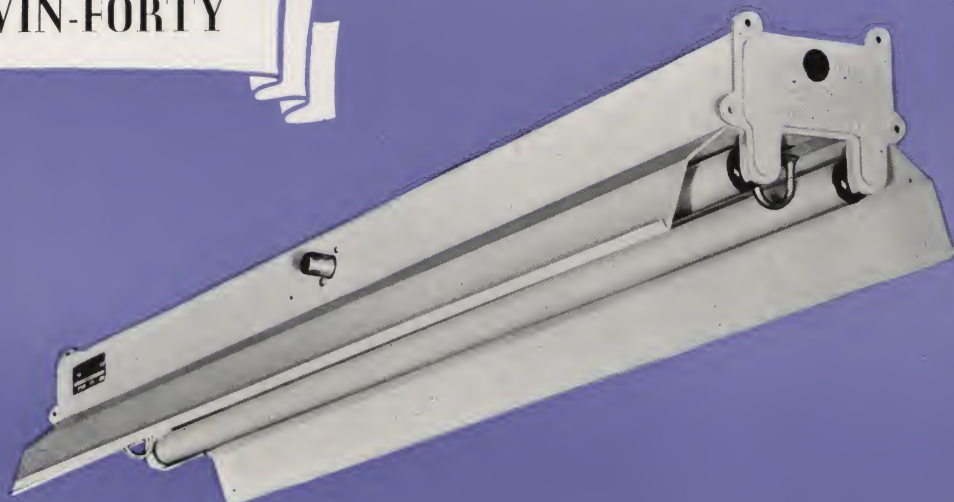
ESSENTIAL DATA—HIGH POWER FACTOR—110/120V.

Cat. No.	Finish	Cycle	Lamp Data	Shipping Weight
4225	Baked-enamel	25	2-40w-48"	40 lbs.
4225P	Porcelain-enamel	25	2-40w-48"	40 lbs.
4260	Baked-enamel	60	2-40w-48"	30 lbs.
4260P	Porcelain-enamel	60	2-40w-48"	30 lbs.
34225	Baked-enamel	25	*3-40w-48"	55 lbs.
34225P	Porcelain-enamel	25	*3-40w-48"	55 lbs.
34260	Baked-enamel	60	3-40w-48"	40 lbs.
34260P	Porcelain-enamel	60	3-40w-48"	40 lbs.
4000	Baked-enamel	Egg-crate louvre for Turret-type		10 lbs.
4014	Suspension Clamp			2 lbs.

* The 25 cycle 3-lamp units are for operation on 3 phase, 208 volts.



TWIN-FORTY



This is the original Twin-Forty industrial unit. Its basic design using rugged cast ends which support the sockets, and maintain them in a permanently fixed position, has often been copied; but has never been improved upon.

The exclusive 'Wilson' quick-release catch, which permits the reflector to be removed by simply loosening two spring-loaded clamps, reduces maintenance time to a minimum.

The fixtures are finished throughout in white, which presents a clean, pleasing appearance. They are available with either porcelain-enamel or baked-enamel reflectors.

Four mounting lugs on either end accommodate chain or wire for suspension, and permit the unit to be tilted for angular use.

The starters are located on the outside of the body for convenience.

When in the market for the finest in industrial lighting, specify the Twin-Forty.

ESSENTIAL DATA—HIGH POWER FACTOR—110/120V.

Cat. No.	Finish	Cycle	Lamp Data	Shipping Weight
4025	Baked-enamel	25	2-40w-48"	40 lbs.
4025P	Porcelain-enamel	25	2-40w-48"	40 lbs.
4060	Baked-enamel	60	2-40w-48"	30 lbs.
4060P	Porcelain-enamel	60	2-40w-48"	30 lbs.
34060	Baked-enamel	60	3-40w-48"	35 lbs.
34060P	Porcelain-enamel	60	3-40w-48"	35 lbs.
10060	Baked-enamel	60	2-100w-48"	55 lbs.
10060P	Porcelain-enamel	60	2-100w-48"	55 lbs.
4000	Egg-crate louvre (Baked-enamel for 2-40w units)			10 lbs.

FEATURES

- Cast ends support sockets permanently in position.
- Spring loaded quick-release catch on reflector.
- Starters easily accessible.
- Convenient lugs for hanging or joining units.
- Removable plug in ends.

Typical Distribution Curve



Close-up End view



Dimensions—Length 48½", Width 12", Height 7"

ILLUMINATION CODE LETTER—TWIN-FORTY

(See Chart Back Cover)

Room Proportions	Twin 40	Triple 40	Twin 100
Large *	L	Q	U
Medium **	K	P	S
Small ***	H	M	O

* Room Width = 4 Times Height. ** Room Width = 2 Times Height.
*** Room Width = Height.



VAPORLUME



The VAPORLUME fixture has been carefully engineered to provide the highest in lighting efficiency combined with maximum protection. It is vapor-proof, and is recommended for use in non-explosive atmospheres. The vapor and dust tight door is rigidly constructed. Eight specially designed clamps provide uniform pressure against the gasket, and hermetically seal the interior.

This fixture may be used directly in spray-booths. A special quick-release switch is incorporated in the fixture. This switch operates immediately the door is opened. In this way the circuit is broken before the tubes can be extracted.

There are eight studs along the upper edge which permit of mounting the fixture flush in the ceiling of spray-booths. See dimension print showing studs on $14\frac{1}{4}"$ x $12\frac{7}{16}"$ centres.

The entire fixture is finished in white baked-enamel. It is ruggedly constructed and will give many years of satisfactory service.

ESSENTIAL DATA—HIGH POWER FACTOR—110/120V.

Cat. No.	Type	Lamp Data	Cycle	Shipping Weight
V425	Vapor-proof	2-40w-48"	25	80 lbs.
V460	Vapor-proof	2-40w-48"	60	60 lbs.

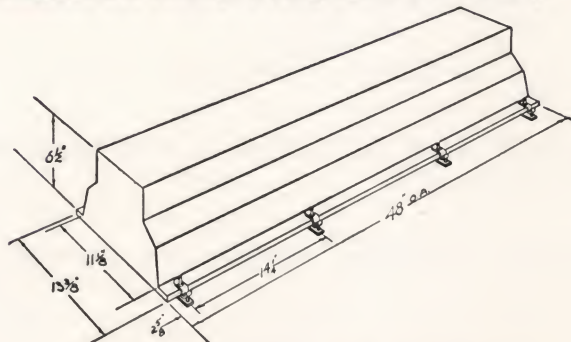
FEATURES

- Vapor and dust proof.
- Door hinges open for servicing.
- Quick-release switch opens circuit for safety when changing lamps.
- C.S.A. approved.
- Studs for easy recessing.
- Threaded flanges for conduit mounting.

Typical Distribution Curve



Dimension print showing recessing data and stud spacing



ILLUMINATION CODE LETTER—VAPORLUME (See Chart Back Cover)

Room Proportions	Vapor-proof Unit
Large *	J
Medium **	I
Small ***	F

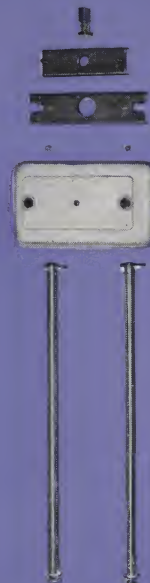
* Room Width = 4 Times Height. ** Room Width = 2 Times Height.
*** Room Width = Height.



MOUNTING DATA



Close-up of "Wilson" levelling-bar. Upper bar is fastened to outlet box and lower bar may be levelled by adjusting cap-nuts up or down on threaded stems.

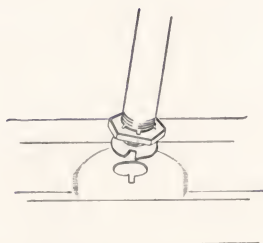


The famous "4010" hanger. The white baked-enamel canopy and polished-chrome rods provide a durable, pleasing finish.

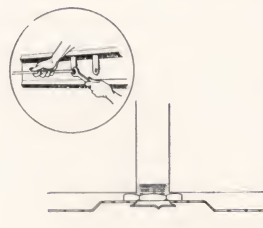
HOW TO ASSEMBLE THE WILSON "4010" HANGER



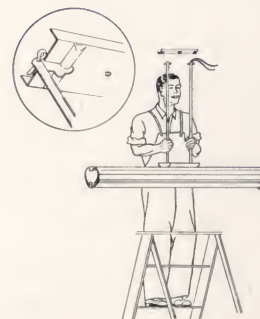
Mount the levelling bar to outlet box in ceiling. Make a temporary adjustment by loosening cap-nut (A) to the levelling bar if necessary.



Loosen nuts on suspension rods, then thread the notched flanges into the keyhole slots in top of fixture.



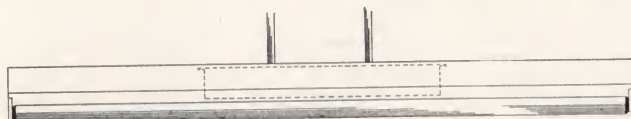
Turn rod until the flange is completely inside, then tighten nut firmly.



Slip canopy over rods and hook rods into levelling bar. Make final adjustment for levelling if necessary. Connect up and put canopy in place.

No. 4010 Hanger Assembly. Standard Packaged Quantity . . . 1 Shipping Weight . . . 5 lbs. Standard hanger is 24" long.
Other lengths available to order.

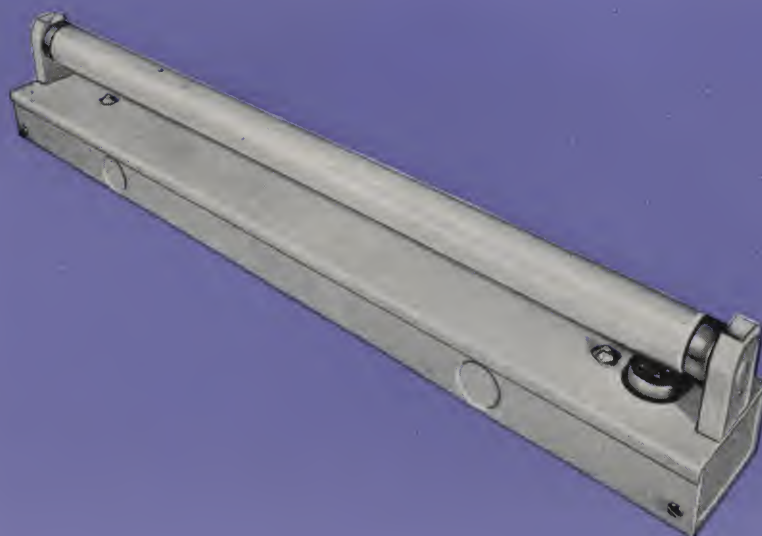
MOUNTING DATA FOR CLOSE-UP FIXTURES IN 2-LIGHT ONLY



Illustrated above are the positions of the ballasts when changing over a 2-lamp fixture from the close-up style to suspension style or vice-versa. Holes are punched in the body of the fixture to accommodate this change-over.



FLUOROSTRIP



We are proud to present the new "Fluorostrip." This is a single lamp unit available in lengths from 18" to 48". The fixtures are designed in such a way that they may be joined in continuous runs with no break between the sockets.

The unique end cap may be removed and inserted again to form a connector strip to make a solid connection between adjacent fixtures. This eliminates the necessity for use of connecting nipples and provides a full size wiring channel for multiple circuits.

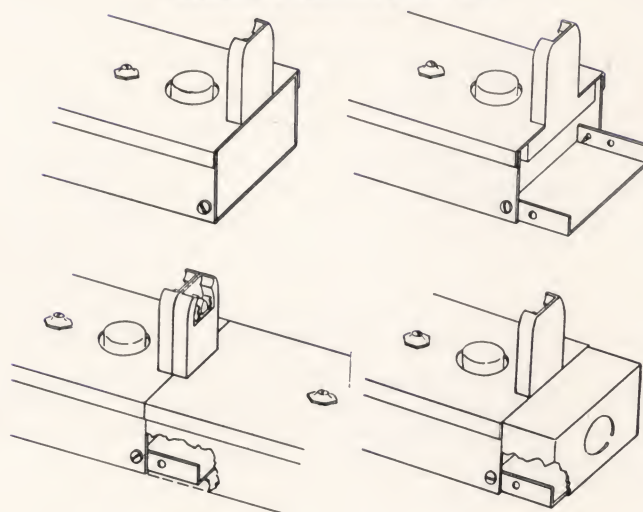
A small B.X. connector box is available for application at the end of a run to make suitable connections.

This strip also accommodates the A, C, and E style reflectors which provide a unit of great versatility for practically any strip or outline lighting application.

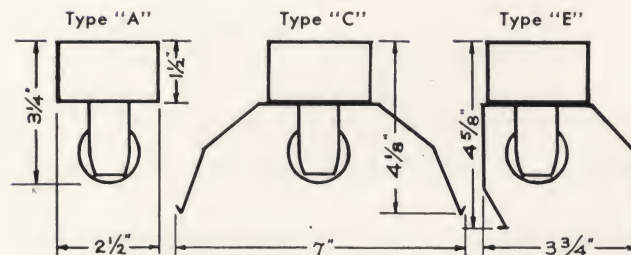
The compact size of the wiring channel permits the use of this fixture in wall cases and other restricted areas. The channel is only 1 1/2" x 2 1/2".

The fixtures are finished entirely in hard wearing white-baked enamel which provides an efficient reflecting surface combined with excellent appearance.

Assembly of Removable End Cap



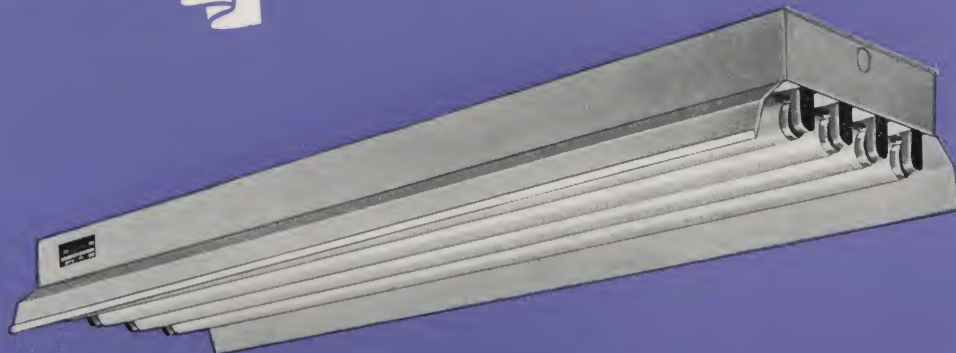
Reflector Styles



ESSENTIAL DATA—HIGH POWER FACTOR—110/120V.

Cat. No.	Lamp Data	Pkg. Quantity	Shipping Weight	
			25 Cycle	60 Cycle
118	1-15w-18"	6	31 lbs.	26 lbs.
124	1-20w-24"	6	33 lbs.	28 lbs.
136	1-30w-36"	6	43 lbs.	38 lbs.
148	1-40w-48"	6	49 lbs.	44 lbs.
4020	B.X. end cap	6	2 lbs.	

UTILITY LINE



The 'UTILITY LINE' of fluorescent fixtures offers a wide range of units for many lighting applications. The fixtures are available in 2, 4, and 6 lamp units in lengths from 18" to 48". Note that the overall length of the fixtures is the same as the lamp length. This permits the sockets to touch when mounted in continuous runs; thus minimizing the break in the line of light.

There are three types of reflectors available for use with any of the above fixtures. The "A" reflector is a flat cover. The "C" reflector is the standard R.L.M. style, and the "E" reflector is an angle type. These shapes are illustrated by line drawings on page 16.

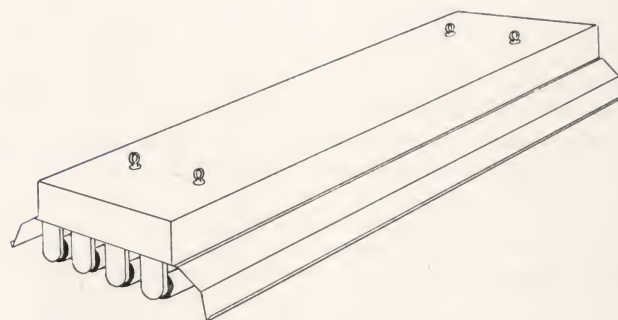
These fixtures are excellent for such locations as wall-cases, corridors, industrial areas, stores; and may be run in continuous rows for large area lighting, such as supermarkets.

All of these fixtures are supplied 2½" deep so that they may be joined in continuous rows. Knockouts are provided in the ends to accommodate nipples for connecting adjacent units.

All fixtures are finished in hard-wearing white, baked-enamel.

The C448 unit, illustrated above, is frequently used as a 4-lamp industrial unit. When specified, it is equipped with 4 fixture loops to accommodate jack-chain.

This fixture is ideal where a high-concentration of light is required in a specific area, such as over make-up tables, printing presses, etc.



Location of Fixture Loops on C448

ESSENTIAL DATA—HIGH OR LOW POWER FACTOR—110/120V

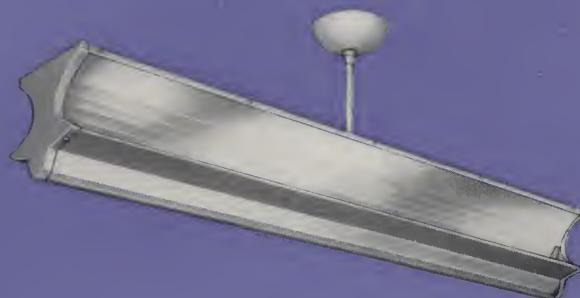
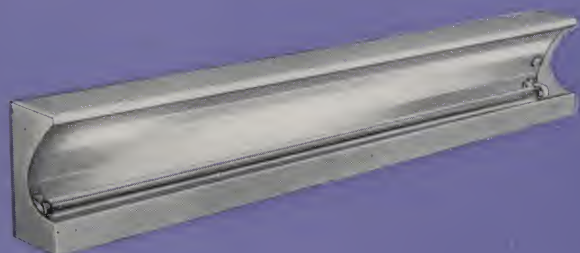
Cat. No.	Lamp Data	Dimensions	Shipping Weight	
			25 Cycle	60 Cycle
218	2-15w-18"	5½" x 2½" x 18"	18 lbs.	14 lbs.
418	4-15w-18"	10¾" x 2½" x 18"	30 lbs.	22 lbs.
618	6-15w-18"	15⅞" x 2½" x 18"	45 lbs.	32 lbs.
224	2-20w-24"	5½" x 2½" x 24"	20 lbs.	15 lbs.
424	4-20w-24"	10¾" x 2½" x 24"	32 lbs.	25 lbs.
624	6-20w-24"	15⅞" x 2½" x 24"	50 lbs.	35 lbs.
236	2-30w-36"	5½" x 2½" x 36"	30 lbs.	20 lbs.
436	4-30w-36"	10¾" x 2½" x 36"	42 lbs.	32 lbs.
636	6-30w-36"	15⅞" x 2½" x 36"	50 lbs.	38 lbs.
248	2-40w-48"	5½" x 2½" x 48"	30 lbs.	20 lbs.
448	4-40w-48"	10¾" x 2½" x 48"	50 lbs.	35 lbs.
648	6-40w-48"	15⅞" x 2½" x 48"	65 lbs.	50 lbs.

SPECIFY A, C, or E reflector when ordering. Also state whether HIGH or LOW power factor is required.

FOR WINDOW LIGHTING USE THE "E" STYLE REFLECTOR WITH ANY OF THE ABOVE FIXTURES.



GERMEX



Wilson "GERMEX" fixtures have been carefully engineered to provide safe and efficient utilization of the anti-bactericidal 2537 ray.

These original designs combine smartness with utility. They are compact, and have no unnecessary ridges or ledges to catch dust and dirt. The scientifically designed reflector assures maximum utilization of the energy with a minimum of hazard. The rays are directed across the upper part of the room. Careful shielding and properly regulated cut-off assure the user of freedom from harmful effects.

The suspension type fixture is recommended in large high rooms where side-wall mounting will not adequately cover the area.

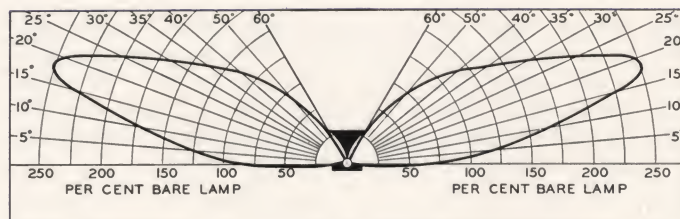
For general use, the wall mounting type is generally recommended. This unit is available in three sizes. The 36", 30 watt size is ideal for rooms where there are many people, such as theatres, stores, etc. The 18", 15 watt size is ideal for offices, waiting-rooms, small stores, etc. The 12", 8 watt size is recommended for use in homes, nurseries, and other small areas where traffic is light.

The 30 and 15 watt sizes are finished in white baked-enamel. The 8 watt size is finished in cream enamel to harmonize well with home interiors.

The reflectors are of Electro-Bright aluminum which has a maximum reflectivity. It is recommended that both reflector and lamp be wiped clean with a dry cloth every two days. (Abrasive cleaners should not be used).

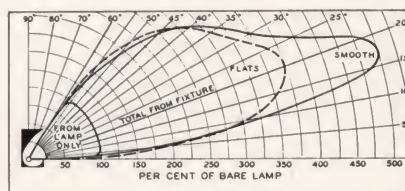
The germicidal lamp used in these fixtures operates in the same way as the regular fluorescent lamp. However, there is no white coating on the inside of the tube and only the mercury-arc glow is visible. This arc generates most of its energy in the bactericidal range of 2537 A. The glass tube is of special quality which permits this ray to pass through; thus irradiating the air in the range of the fixture and destroying practically 100% of the bacteria present. Exhaustive tests have demonstrated the extreme effectiveness of this method of destroying bacteria.

THE ULTRA-VIOLET TRANSMISSION FROM THE GERMICIDAL LAMP IS INJURIOUS TO THE EYES AND CARE SHOULD BE TAKEN TO AVOID EXPOSURE TO THE DIRECT RAYS. The use of properly designed fixtures is recommended for safe operation.



DISTRIBUTION CURVE FOR SUSPENSION FIXTURE

Note how ray is carefully controlled to avoid light below horizontal. Upward cut-off is under 60° to minimize reflection from ceiling. Highest output is at 20° zone to provide maximum irradiation of upper air in room.



DISTRIBUTION CURVE FOR BRACKET FIXTURE

Angle of cut-off is similar to that of suspension type. The area from 60° to 90° is troublesome and causes fading and ceiling reflection. This area has been carefully omitted in these designs.

ESSENTIAL DATA—HIGH POWER FACTOR—110/120V.

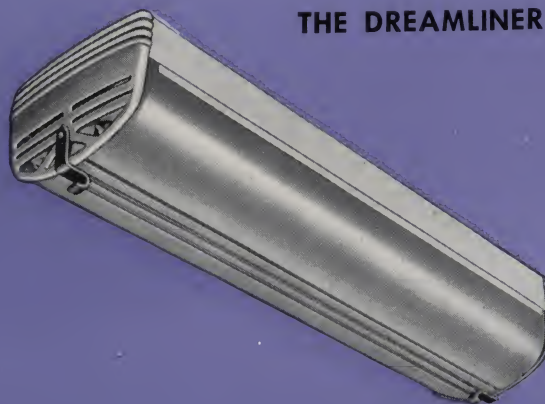
Cat. No.	Lamp Size	Type	Dimensions	Shipping Weight	
				25 Cycle	60 Cycle
F150	8w-12"	Bracket	3" x5" x13"	10 lbs.	8 lbs.
F152	15w-18"	Bracket	4 1/2" x7" x19"	20 lbs.	16 lbs.
F153	15w-18"	Suspension	6" x6 1/2" x19"	24 lbs.	20 lbs.
F154	30w-36"	Bracket	4 1/2" x7" x37"	26 lbs.	20 lbs.
F155	30w-36"	Suspension	6" x6 1/2" x37"	30 lbs.	24 lbs.



KITCHEN UNITS

DREAMLINER This is a high grade kitchen unit which is available in either the two-lamp or three-lamp sizes. The attractive enclosing glass reduces the stroboscopic effect to a minimum. This glass is held in place by a unique end-casting which is spring loaded, and opens and closes by merely turning a thumb screw at the end of the fixture. The fixture is finished in hard-wearing white baked-enamel which permits of washing the unit the same as the other enamel surfaces in the kitchen.

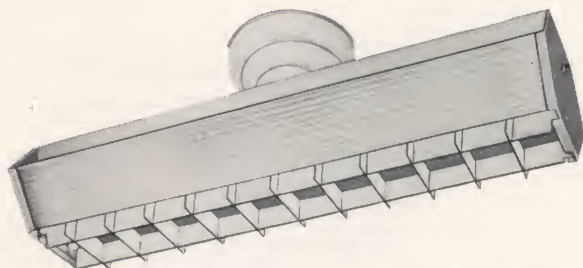
THE DREAMLINER



ESSENTIAL DATA—HIGH POWER FACTOR—110/120V.

Cat. No.	Type	Lamp Data	Power Factor	Shipping Weight	
				25 Cycle	60 Cycle
F20.	Open Tube	2-20w	Low	8 lbs.	6 lbs.
F20.	"	" "	High	7 lbs.
F21.	Glass Enclosed	2-20w	Low	10 lbs.	8 lbs.
F21.	"	" "	High	9 lbs.
F22.	Open Tube	3-20w	Low	10 lbs.	8 lbs.
F22.	"	" "	High	9 lbs.
F23.	Glass Enclosed	3-20w	Low	12 lbs.	10 lbs.
F23.	"	" "	High	11 lbs.

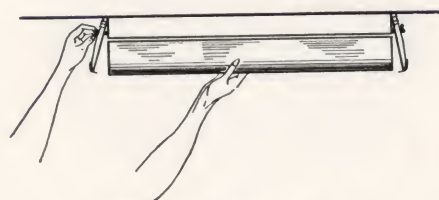
F 130 This popular unit is available for 2-20 watt lamp operation only. The glass side panels and bottom louvre combine to make this unit not only attractive but highly efficient. It is also finished in the special 'Wilson' white baked-enamel, which guarantees many years of satisfactory service.



ESSENTIAL DATA—HIGH POWER FACTOR—110/120V.

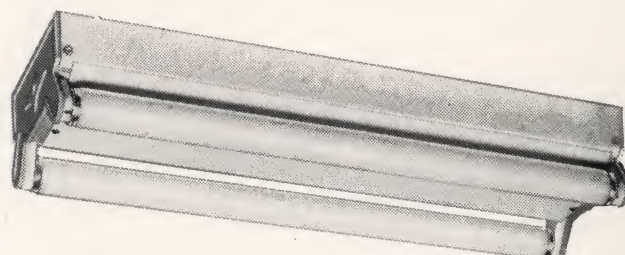
Cat. No.	Lamp Data	Shipping Weight	
		25 Cycle	60 Cycle
F130.	2-20w-24"	12 lbs.	10 lbs.

Cross Section



Method of Removing Glass

F 180 This is an open type unit which accommodates 2-20 watt lamps. It is strongly constructed with cast ends, which assure permanent socket spacing. The unit is easily cleaned and serviced and its sturdy construction makes it very desirable for commercial as well as domestic applications.



ESSENTIAL DATA—HIGH POWER FACTOR—110/120V.

Cat. No.	Lamp Data	Shipping Weight	
		25 Cycle	60 Cycle
F180.	2-20w-24"	12 lbs.	10 lbs.



MISCELLANEOUS LIGHTING

"7446" FEATURES

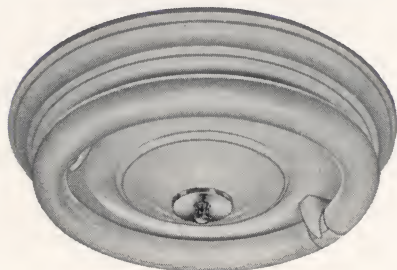
- Generous reflector design assures glare-free light over entire working area.
- Sturdily constructed, and finished in the famous "Wilson" bronze plate.
- Low centre of gravity, eliminates tipping.
- Cast base has useful pen-rack.
- Rubber feet prevent marring desk tops.
- For use with one 15 watt, 60 cycle tube.
- Packed in individual cartons.

No. 7446—60 cycle. Shipping weight 15 lbs.



FLUORESCENT DESK LAMP

EXPOSED CIRCLINE FIXTURE



This fixture is an economical open-tube circline unit. The ceiling canopy is nicely designed to hold the lamp firmly in position. It also contains the ballast for 60 cycle operation.

The fixture is finished in hard-wearing, baked, white-enamel. It will retain its appearance indefinitely.

Recommended for use in kitchens, bed-rooms, corridors, etc.

No. F160—60 cycle Shipping weight 10 lbs.

This popular wall-bracket is available in either the 18" or 24" sizes. The decorative etched-glass, or Polished Chrome cover, shields the lamp and at the same time enhances the appearance of the unit. The base is finished in white baked-enamel and is arranged for mounting over an outlet-box.

These units are excellent for use in bath-rooms, dressing rooms, restaurants, theatres, and any location where an efficient and decorative wall-bracket is desired.

No. 5544 18"—15 watt size—60 cycle . . . Shipping weight 8 lbs.

No. 5545 24"—20 watt size—60 cycle . . . Shipping weight 9 lbs.

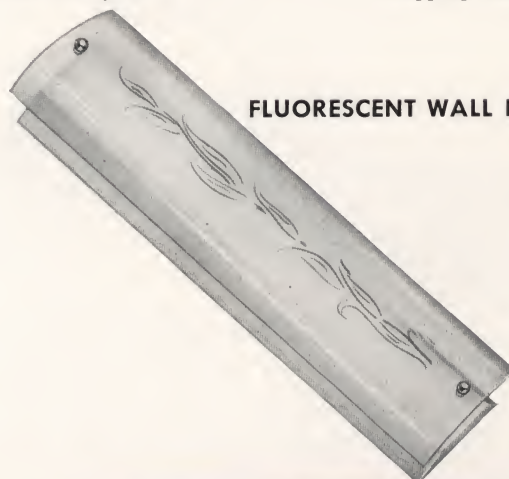
ENCLOSED CIRCLINE FIXTURE



The enclosed-type circline fixture is a smart looking modern unit. It has a short rod suspension to support the lamp and decorative glass shade about 6" below the ceiling. The ballast and sockets are concealed in the fixture. The metal parts are finished in white baked-enamel for permanence.

This unit is highly efficient and is well adapted to use in living-rooms, dining-rooms, kitchens, etc.

No. F161—60 cycle Shipping weight 14 lbs.



FLUORESCENT WALL BRACKET

SHOWCASE LIGHTING



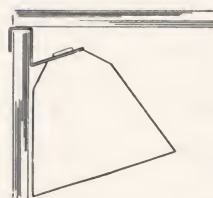
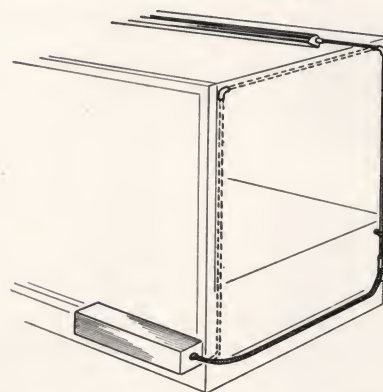
Here is a complete BOX-LINE of showcase fixtures. We have spent a good deal of time in developing this line and we feel that it will answer the need for a compact and versatile showcase unit which will fit the majority of showcases.

There are three basic sizes which will be suitable for most cases up to 6 feet long. On longer cases, combinations of these basic units may be used to make up any length of lighting-trough desired.

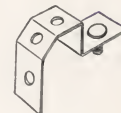
The reflector has been kept to a minimum size, to look as inconspicuous as possible. The versatile clip permits of the unit being mounted in glass, metal, or wood-framed cases with equal facility. There are two standard finishes available, brushed-chrome or bronze.

All necessary parts required to instal these units are included in the standard package. They are the reflector, conduit, ballast-box, ballast, wire, mounting-clips, and screws. An instruction sheet is enclosed to facilitate wiring and installation.

INSTALLATION DETAIL



*View showing clip mounted
over edge of glass.*



*Clip is adaptable to wood,
metal, or glass cases.*

ESSENTIAL DATA—HIGH or LOW POWER FACTOR—110/120V.

Cat. No.	Lamp Data	Cycle	Length	Shipping Weight
5531	1-15 watt	60	20"	12 lbs.
5532	1-30 watt	60	38"	16 lbs.
5533	1-15 & 1-30w	60	57"	24 lbs.

EACH PACKAGED UNIT CONTAINS THE FOLLOWING PARTS:

- | | |
|------------------------|----------------------------|
| One reflector strip. | One threaded connector. |
| One ballast box. | One straight connector. |
| One ballast. | Two B.X. connectors. |
| Two mounting clips. | Two 38" lengths tubing. |
| Two B.X. cable clamps. | One 30" length B.X. cable. |
| Two elbows. | Necessary fixture wire. |



RECESSED SPOTLIGHTS

We present on this page a number of incandescent recessed units. These are recommended as auxiliary equipment to the regular fluorescent lines.

The fixed-spots and adjustable-spots lend themselves to many combination layouts for modern lighting treatment.



A typical installation combining flush down-lights with F12 Recessalite units.

INCANDESCENT SPOTLIGHT UNITS

OPAL-GLASS AND LOUVRED DOWN-LIGHT

This fixture contains an R40 Spot or Flood Lamp, directed down through a concentric louvre. The bottom plate is of opal glass which is illuminated to provide a very attractive unit.

Cat. No.	Lamp Data
5537	R-40
Opening Size	Box Depth
10" x 10"	8"

FIXED ENCLOSED DOWN-LIGHT

For flush mounting where ceiling depth is limited. Ceiling ring finished in Polished Chrome.

Cat. No.	Lamp Data
5582	R-40
Opening Size	Box Depth
5¾"	8"

FIXED OPEN DOWN-LIGHT

For flush mounting where ceiling depth permits free circulation of air. Ceiling ring finished in Polished Chrome.

Cat. No.	Lamp Data
5583	R-40
Opening Size	Bracket Depth
5¾"	8"

ADJUSTABLE SQUARE DOWN-LIGHT

This fixture has the Gimbel-Ring mounting for the R40 Spot or Flood Lamp. It is adjustable through 30°. The face plate is finished in baked white-enamel. It is 12" square to match the recessed types of fluorescent fixtures.

Cat. No.	Lamp Data
5548	R-40
Opening Size	Box Depth
10" x 10"	8"

ADJUSTABLE ENCLOSED DOWN-LIGHT

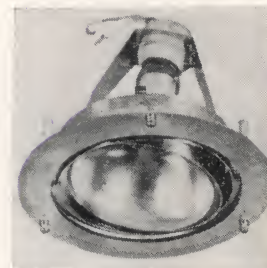
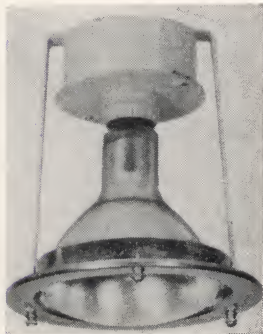
The Gimbel-Ring mounting permits adjustment through 30°. For flush mounting where ceiling depth is limited. Ceiling ring finished in Polished Chrome.

Cat. No.	Lamp Data
5580	R-40
Opening Size	Box Depth
7½"	9"

ADJUSTABLE OPEN DOWN-LIGHT

The Gimbel-Ring mounting permits adjustment through 30°. For flush mounting where ceiling depth permits free circulation of air. Ceiling ring finished in Polished Chrome.

Cat. No.	Lamp Data
5581	R-40
Opening Size	Bracket Depth
7½"	7"



GENERAL INFORMATION

STARTERS

The function of the starter is to close the circuit which lights the cathode filaments. This heats the tube, vaporizing the mercury so that the arc will strike along the tube. When this arc is struck the starter circuit opens.

The standard starters are FS 2—for 15 and 20 watt lamps, and FS 4—for 30 and 40 watt lamps. This style of starter continues to try to start the lamp even after it is deactivated.

The WATCH DOG or NO BLINK starter, on the other hand, has an automatic re-set switch. This switch opens when the lamp fails thus preventing the annoying blinking, (which will continue with regular starters until they burn out). The NO BLINK type starter must be re-set manually when a new lamp is inserted.

BALLASTS

The function of the ballast is to limit the current passing through the tube. Besides serving as a choke, it raises or lowers the voltage so as to regulate the wattage of the lamp.

Ballasts may be either of high or low power-factor. To change a low power-factor ballast to high power-factor, it is necessary to add a capacitor to the circuit. Most ballasts in general use have a built-in capacitor.

Tulamp ballasts are used in multiple lamp fixtures. These are of high power-factor type, and also put the two lamps out of phase; thus reducing the stroboscopic (flickering) effect to a minimum.

QUICK-START BALLASTS

Quick-Start ballasts are available in the Tulamp 40 watt size. They provide instant starting so that the lamp lights up immediately the switch is turned on. They will also operate through a much wider range of voltages than the conventional ballast. They will start quite satisfactorily down as low as 80 volts. They are excellent for operating lamps in cold locations such as store windows and meat-coolers. They will start and operate lamps as low as 0° Fahrenheit. (they do not compensate for the loss of efficiency inherent in low temperature operation, however). No starters are required with these ballasts. Lamps are available for use with these ballasts—specify Quick-Start on order.

LOW TEMPERATURE OPERATION

Fluorescent lamps operate most efficiently when the room temperature is between 70 and 80 degrees. When the upper air in a room rises much over 100°, a perceptible loss in light will occur, and there is great danger of overheating of the ballasts.

As the temperature falls below 70 degrees the efficiency of the lamp decreases. At 40 degrees the light output is down about 15%, and from this point downward the efficiency drops about 1% for each degree.

It is increasingly difficult to start the lamps as the temperature decreases. Many lamps will not start below 50°, although by keeping the line voltage up and using manual starters or thermal starters, satisfactory starting may be obtained much below this figure. Where continual low-temperature operation is required, such as in meat-coolers, the special low-temperature lamp should be used along with the FS-44 type starter.

The 100 watt lamp starts more easily and maintains its efficiency better under low temperature conditions than the regular 40 watt type.

LAMP COLOURS

There are four standard colours of fluorescent lamps in general use.

- | | |
|-------------------|--|
| 1—3500° White. | This is the standard tube which is used for commercial and industrial applications. It is the most efficient, producing 2300 lumens in the 40 watt size. |
| 2—4500° White. | This is a white tube which is closer to daylight than the 3500°. It is generally used for store lighting where coloured goods are displayed. It provides a very pleasing appearance in a store along with high efficiency. The 40 watt tube produces 2100 lumens of light. |
| 3—6500° Daylight. | This tube is used for simulating daylight. It is excellent for colour matching and may be used to advantage in printing and dyeing plants. The 40 watt tube produces 1920 lumens of light. |
| 4—Soft-White. | This tube has a predominantly pink cast. It is used where a warm light is desirable such as in beauty parlors. It is excellent in meat cases and over lunch counters as it enhances the appearance of food. The 40 watt produces 1500 lumens of light. |

In addition to the four standard colours there are available red, gold, green, blue, and pink tubes. These are excellent for decoration, or for use in combination with the standard colours. They are rarely used alone for interior lighting as their monochromatic nature tends to distort coloured materials a great deal.

DIRECT CURRENT OPERATION

Fluorescent lamps may be operated on direct-current if proper series resistance is used, along with a suitable starting switch. The resistors draw as much wattage as the lamp itself, thus the overall efficiency of the fixture is somewhat lower than the A.C. type. On tubes of 36" or longer, a reversing switch should be used. Lamp life is not as satisfactory when operated on direct-current.

ILLUMINATION DESIGN VALUES

Procedure for Use of Tables:

1. Select type and size of fixture from catalogue.
2. Select code letter from table on fixture page.
3. Decide on ft. candles required and locate in table below opposite code letter.
4. Determine area per fixture required from top of table.
5. Divide area per fixture into total area to be lighted to obtain total fixtures required.

MODERN LIGHTING PRACTICE			
Maintained Ft. Candles	APPLICATIONS		
	Offices	Stores	Factories
20 (15-30)	Lobby and Reception Rooms	Circulation Areas	Rough Manufacture
50 (30-70)	Detailed Visual Tasks, Bookkeeping, Accounting, etc.	Merchandise Sales Areas	Detailed Visual Tasks, Medium Fine Assembly, Inspection, etc.
100 (70-150)	Critical Visual Tasks, Proof-reading, etc.	Counter Displays, Showcases and Wall Cases	Critical Visual Tasks, Fine Assembly, Inspection, Fine Machining

Illumination in Ft. Candles in Service* Based on 70% Maintenance Factor

Area per Fixture	40 Square Feet		60 Square Feet		80 Square Feet		100 Square Feet		120 Square Feet		140 Square Feet		160 Square Feet		180 Square Feet	
	Light Finish	Medium Finish	Light Finish	Medium Finish	Light Finish	Medium Finish	Light Finish	Medium Finish	Light Finish	Medium Finish	Light Finish	Medium Finish	Light Finish	Medium Finish	Light Finish	Medium Finish
A	16	13	12	10	8	7	6	5	5	4	4	3	4	3	4	3
B	18	15	14	12	10	8	7	6	6	5	5	4	5	4	4	3
C	20	17	16	13	11	9	8	7	7	6	6	5	5	4	5	4
D	24	20	18	15	12	10	10	8	8	7	7	6	6	5	5	4
E	28	23	22	18	14	12	12	10	10	8	8	7	7	6	6	5
F	31	26	24	20	16	13	13	11	11	9	10	8	8	7	7	6
G	35	29	26	22	18	15	14	12	12	10	10	8	8	7	7	6
H	40	33	30	25	20	17	17	14	13	11	11	9	10	8	8	7
I	44	37	32	27	23	19	18	15	14	12	12	10	11	9	10	8
J	49	41	37	31	25	21	20	17	17	14	14	12	12	10	11	9
K	54	45	41	34	28	23	23	19	18	15	16	13	13	11	12	10
L	59	49	44	37	30	25	24	20	19	16	17	14	14	12	13	11
M	64	53	48	40	32	27	26	22	22	18	18	15	16	13	14	12
N	68	57	52	43	35	29	29	24	23	19	19	16	17	14	16	13
O	74	62	56	47	37	31	31	26	25	21	22	18	19	16	17	14
P	80	67	61	51	41	34	34	28	26	22	23	19	20	17	18	15
Q	86	72	65	54	43	36	36	30	29	24	25	21	22	18	19	16
R	92	77	69	58	47	39	38	32	31	26	26	22	23	19	20	17
S	98	82	76	63	49	41	41	34	32	27	29	24	25	21	22	18
T	104	87	79	66	53	44	43	36	35	29	30	25	26	22	23	19
U	110	92	83	69	55	46	46	38	37	31	32	27	28	23	24	20
V	117	98	89	74	59	49	49	41	40	33	35	29	30	25	26	22
W	125	104	94	78	62	52	52	43	42	35	36	30	31	26	28	23
X	132	110	100	83	66	55	55	46	44	37	38	32	34	28	30	25
Y	139	116	104	87	70	58	58	48	47	39	41	34	35	29	31	26
Z	146	122	112	93	73	61	61	51	49	41	43	36	37	31	32	27

*Values are for 3500°K White Lamps. Daylight Lamps would give 15% lower values.

ILLUMINATION DESIGN VALUES

Procedure for Use of Tables:

1. Select type and size of fixture from catalogue.
2. Select code letter from table on fixture page.
3. Decide on
below op
4. Determin
of table.
5. Divide a
lighted to

MODERN LIGHTING PRACTICE

Maintained Ft. Candles	APPLICATIONS		
	Offices	Stores	Factories
20 (15-20)	Lobby and	Circulation	Rough Manufacture
			Detailed Visual Tasks, Medium Fine Assembly, Inspection, etc.
			Critical Visual Tasks, Fine Assembly, Inspec- tion, Fine Machining

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From the collection of:

Mike Jackson, FAIA

ILLUMINATION CODE LETTER

Area per Fixture
Room Conditions
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z

104	87	79	66	53	44	43	36	35	29	30	25	20	22	23	19
110	92	83	69	55	46	46	38	37	31	32	27	28	23	24	20
117	98	89	74	59	49	49	41	40	33	35	29	30	25	26	22
125	104	94	78	62	52	52	43	42	35	36	30	31	26	28	23
132	110	100	83	66	55	55	46	44	37	38	32	34	28	30	25
139	116	104	87	70	58	58	48	47	39	41	34	35	29	31	26
146	122	112	93	73	61	61	51	49	41	43	36	37	31	32	27

180 Square Feet	
Light Finish	Medium Finish
4	3
4	3
5	4
5	4
6	5
7	6
7	6
8	7
10	8
11	9
12	10
13	11
14	12
16	13
17	14
18	15
19	16
20	17
22	18

*Values are for 3500°K White Lamps. Daylight Lamps would give 15% lower values.